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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/598,899 | 09/14/2006 | Yasuhito Inagaki | 09792909-6816 | 1813 |

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| EXAMINER |
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LEE, DORIS L

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| ART UNIT | PAPER NUMBER |
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1796

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| MAIL DATE | DELIVERY MODE |
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03/23/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/598,899 | Applicant(s) INAGAKI, YASUHIITO | |
| | Examiner Doris L. Lee | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 30-33, 35-39 and 42-45 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 30-33, 35-39 and 42-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on December 2, 2009. In particular, claim 30 and 37 which have been amended to recite that the aromatic skeleton is in a side chain. This combination of limitations was not present in the original claims. Thus, the following action is properly made final.
2. All outstanding objections and rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on December 2, 2009
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. **Claim 33** recites the limitation "wherein said aromatic polymer has an aromatic skeleton in a main chain thereof and is at least ... polysulfone." There is insufficient antecedent basis for this limitation in the claim because in claim 30 from which it depends, the aromatics are only in the side chains and are not in the main chain. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. **Claims 30-32, 35-39, and 42-44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Inagaki et al (US 5,994,423)**.

The rejection is adequately set forth in paragraph 11 of the Office Action mailed on September 2, 2009 and is incorporated here by reference.

7. **Claim 45** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nodera et al (WO 2002/059206, please refer to US 2004/0054045 for English language equivalent and mapping, henceforth referred to as Nodera '206)** in view of **Nodera (WO 2001/010956, please refer to US 6,727,312 for English language equivalent and mapping, henceforth referred to as Nodera '956).**

Regarding claim 45, Nodera '206 teaches a polycarbonate resin composition having flame retardant properties (Abstract) comprising: an aromatic polymer containing monomer units having aromatic side chains (such as polystyrene) ([0031]). As this is a homopolymer, then 100 mol % have this side chain. This polymer has sulfonic acid groups incorporated into the polymer ([0034]) from more than 0 % to less than or equal to 100% ([0033]) into the aromatic polymer.

However, Nodera '206 fails to teach the addition of a fluoro olefin resin as an anti-drip agent.

Nodera '956 teaches a flame retardant polycarbonate resin (Abstract) which contains a polyfluoro-olefin resin (col.5, line 36).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to add the polyfluoro-olefin resin of Nodera '956 into the composition of Nodera '206. One would have been motivated to do so in order to receive the expected benefit of preventing the resin moldings from being melted to drip when fired (Nodera

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'9956, vol. 5, lines 35-40). They are combinable because they are both concerned with the same field of endeavor, namely flame resistant polycarbonate resins.

Response to Arguments

8. In light of the applicant's amendment filed on December 2, 2009, the objections set forth in paragraph 3, the 35 USC 112 1st and 2nd paragraph rejections set forth in paragraphs 5, and 7 of the office action mailed on September 2, 2009 has been withdrawn. Also, in light of of applicant's amendment, the art rejections set forth in paragraph 9 (Mark (US 3,978,024) and paragraph 12 (Bailous (US 4,391,935 in view of Mark (US 3,978,024) of the previous office action are withdrawn; the arguments against these rejections been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's arguments filed December 2, 2009 against the Inagaki reference have been fully considered but they are not persuasive for the reasons set forth below.

10. **Applicant's argument:** Inagaki fails to teach an aromatic polymer that includes monomer units having aromatic skeletons in a side chain as required by the claims.

Examiner's response: *Inagaki teaches a polystyrene resin (col. 2, line 52).*

Polystyrene has aromatic groups in a side chain.

11. **Applicant's argument:** Inagaki is directed to urine absorption, not flame retardant properties as required by the claims.

Examiner's response: *It is noted that Inagaki teaches all the compositional limitations of the claimed invention, and although it is drawn to urine absorption and does not explicitly state that it has flame retardant properties, it is noted that per the MPEP*

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Section 2112, I., something which is old does not become patentable upon the discovery of a new property.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doris L. Lee whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Doris L Lee/
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796